#### In the Claims:

The current status of all claims is listed below and supercedes all previous lists of claims.

Please amend claims 1, 2, 10, 17, and 18 as follows.

1. (currently amended) A compound of formula I

$$(R^{1})_{n}$$
 $N - L^{1} - N - L^{2} - R^{5}$ 
 $R^{3} - R^{4}$ 

wherein

 $R^1$  represents a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, halo, cyano, a group  $OSO_2C_{1-4}$  alkyl wherein the alkyl group is optionally substituted with one or more fluorine atoms, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

n represents 0, 1, 2 or 3;

 $R^2$  represents a  $C_{1\text{--4}}$ alkyl group optionally substituted by one or more fluoro or a  $C_{1\text{--4}}$ alkoxy group optionally substituted by one or more fluoro, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1\text{--4}}$  alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1\text{--4}}$ alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

m represents 0 or 1;

 $R^3$  represents H or a  $C_{1-4}$  alkyl group;

 $L^1$  represents a  $(CH_2)_pC_{3-10}$  cycloalkyl $(CH_2)_q$  group in which p and q are independently selected from 0 and 1 and in which the cycloalkyl group may be monocyclic or bicyclic and optionally may be bridged provided that the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, are not linked to the same carbon atom, and wherein one of the carbons may be replaced by O or, alternatively, the group  $-N(R^3)-L^1$ - or the group  $L^4-N(R^4)$  together represent a saturated bicyclic heterocyclic ring containing from 2 to 9 carbon atoms and the nitrogen bearing  $R^3$  or  $R^4$  respectively;

 $R^4$  represents H or a  $C_{1-4}$  alkyl group optionally substituted by one or more of the following: fluoro or  $C_{1-4}$  alkoxy optionally substituted by one or more fluoro;

 $L^2$  represents an alkylene chain  $(CH_2)_s$  in which s represents 1, 2 or 3 wherein the alkylene chain is optionally substituted by one or more of the following: fluoro or  $C_{1-4}$  alkyl;

or L<sup>2</sup> may also represent a 5-6 membered carbocyclic ring fused to R<sup>5</sup>;

 $R^5$  represents phenyl or naphthyl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrrolyl, quinolinyl, indolyl, benzofuranyl, benzo[b/thienyl, imidazolyl, benzimidazolyl, thiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, imidazo[1,2-a]pyridinyl, 5H-pyrrolo[2,3-b]pyrazinyl, 1H-pyrrolo[3,2-c]pyridinyl, 1H-pyrrolo[2,3-b]pyridinyl, 1H-pyrrolo[3,2-b]pyridinyl, 1H-pyrrolo[3,2-b]pyridinyl, 1H-pyrrolo[3,2-b]pyridinyl, 2,1,3-benzoxadiazolyl, quinazolinyl or triazolyl wherein each  $R^5$  is optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, or by a group  $S(O)_a R^y$  in which a is 0, 1 or 2 and  $R^y$  is phenyl optionally substituted by cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro or a holo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro or a function or and  $C_{1-4}$  alkyl group optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, or a

as well as optical isomers and racemates thereof as well as pharmaceutically acceptable salts, thereof; with the proviso that when

R<sup>1</sup> represents a C<sub>1-4</sub>alkoxy group optionally substituted by one or more fluoro or a

C<sub>1-4</sub>alkyl group optionally substituted by one or more fluoro; and

n represents 0 or 1; and

 $R^2$  represents a  $C_{1-4}$ alkyl group optionally substituted by one or more fluoro or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro; and

m represents 0 or 1; and

R<sup>3</sup> represents H or a C<sub>1-4</sub>alkyl group; and

 $L^1$  represents a cyclohexyl group wherein the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, are linked to the cyclohexyl group either via the 1,3 or the 1,4 positions of the cyclohexyl group or  $L^1$  represents a cyclopentyl group wherein the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, are linked to the cyclopentyl group via the 1,3 position of the cyclopentyl group; and

 $L^2$  represents an alkylene chain  $(CH_2)_s$  in which s represents 1, 2 or 3 wherein the alkylene chain is optionally substituted by one or more of the following: a  $C_{1-4}$ alkyl group; and

R<sup>5</sup> represents aryl wherein aryl means phenyl or naphthyl each of which is optionally substituted by one or more of the following: halo, a C<sub>1-4</sub>alkyl group or phenyl, or

R<sup>5</sup> represents a heterocyclic group wherein the term heterocyclic group means thienyl, furyl, pyridyl, pyrrolyl, quinolinyl, indolyl, benzofuranyl or benzo[*b*]thienyl each of which is optionally substituted by one or more of the following: halo or a C<sub>1-4</sub>alkyl group;

or L<sup>2</sup> represents a C<sub>5-6</sub>cycloalkyl group which is fused to an R<sup>5</sup> which is phenyl or a heteroaryl group selected from thienyl, furyl or pyrrolyl;

then  $R^4$  does not represent H or a  $C_{1-4}$ alkyl group; and excluding 1,4-anhydro-2,3,5-trideoxy-3-[[(3,4-dichlorophenyl)methyl]amino]-5-[(4-ethoxy-2-quinolinyl)amino]-D-erythropentitol.

2. (currently amended) A compound as claimed in claim 1 in which  $L^1$  represents a monocyclic - $(CH_2)_pC_{5-6}(CH_2)_q$ - cycloalkyl group in which p and q are independently 0 or 1 wherein there are 3 carbon atoms between the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, wherein one of the carbons of the cycloalkyl group may be replaced by O or the group - $N(R^3)$ - $L^1$ -, or the group  $L^4$ - $N(R^4)$ , together represent a saturated heterocyclic ring containing from 4 to 6 carbon atoms and the nitrogen bearing  $R^3$  or  $R^4$  respectively.

### DOCKET NO.: 133087.11001 (101294-1P US)

**PATENT** 

## 3. (previously presented) A compound of formula IA

$$(R^1)_n$$
 $(R^2)_m$ 
 $(A)_t$ 
 $R^3$ 
 $N-L^2-R^5$ 
 $R^4$ 

in which

 $R^1$  represents chloro, fluoro, methoxy or a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$ alkyl group;

n represents 0, 1 or 2 and when n=1 the substituent is attached to either position 6 or 7;

 $R^2$  represents a  $C_{1-4}$ alkyl group or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

m represents 0 or 1;

R<sup>3</sup> represents H;

A represents CH<sub>2</sub> and t is 0 or 1;

R<sup>4</sup> represents H;

L<sup>2</sup> represents CH<sub>2</sub>, C(CH<sub>3</sub>)<sub>2</sub> or CF<sub>2</sub>; and

 $R^5$  represents aryl or a heterocyclic group selected from thienyl, furyl, pyridyl, pyrrolyl, quinolinyl, indolyl, benzofuranyl, benzo[b]thienyl, imidazolyl, benzimidazolyl, thiazolyl, thiadiazolyl, pyrimidinyl, pyrazolyl, oxazolyl, imidazo[1,2-a]pyridine, 5H-pyrrolo[2,3-b]pyrazine, 1H-pyrrolo[3,2-c]pyridine, 1H-pyrrolo[2,3-b]pyridine, 1H-indazole each of which is optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, or by a group  $S(O)_aR^y$  in which a is 0, 1 or 2 and  $R^y$ 

is phenyl optionally substituted by cyano, halo, a  $C_{1-4}$ alkyl group optionally substituted by one or more fluoro or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro, or by a group  $O_z(CH_2)_wR^z$  in which z and w independently are 0 or 1 and  $R^z$  represents phenyl or a heterocyclic group selected from thienyl, pyridyl, thiazolyl, pyrazolyl, wherein each  $R^z$  is optionally substituted by one or more cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro;

as well as optical isomers and racemates thereof as well as pharmaceutically acceptable salts thereof.

### 4. (previously presented) A compound of formula IB

R1
$$\begin{array}{c}
R2\\
N
\end{array}$$

$$\begin{array}{c}
N-L^2-R^5\\
R^4
\end{array}$$
IB

in which

R<sup>1</sup> represents H, methoxy, dimethylamino, chloro or fluoro;

 $R^2$  represents H, a  $C_{1-4}$ alkyl group or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

R<sup>3</sup> represents H;

A represents CH<sub>2</sub> and t is 0 or 1;

R<sup>4</sup> represents H;

L<sup>2</sup> represents CH<sub>2</sub>, C(CH<sub>3</sub>)<sub>2</sub> or CF<sub>2</sub>; and

R<sup>5</sup> represents 2-thienyl, 3-thienyl, indol-3-yl, 2-pyrrolyl, 5-pyrimidinyl, 4-thiadiazolyl,

pyrazolyl, or quinolin-2-yl each of which is optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro and in addition when  $R^5$  is 2-thienyl it is optionally additionally substituted by pyridyl, 2-thienyl or 3-pyrazolyl each of which is optionally substituted by halo or a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro and when  $R^5$  is indol-3-yl it is optionally additionally substituted by 1-(thiazol-5-yl)methyl which is optionally substituted by halo.

### 5. (previously presented) A compound of formula IC

in which

R<sup>1</sup> represents H, methoxy, dimethylamino, chloro or fluoro;

 $R^2$  represents H, a  $C_{1-4}$ alkyl group or a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

R<sup>3</sup> represents H;

A represents CH<sub>2</sub> and t is 0 or 1;

R<sup>4</sup> represents H;

L<sup>2</sup> represents CH<sub>2</sub>, C(CH<sub>3</sub>)<sub>2</sub> or CF<sub>2</sub>; and

R<sup>5</sup> represents 2-thienyl, 3-thienyl, indol-3-yl, 2-pyrrolyl, 5-pyrimidinyl, 4-thiadiazolyl, pyrazolyl, 1*H*-pyrrolo[3,2-b]pyridinyl or quinolin-2-yl each of which is optionally substituted by

one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro and in addition when  $R^5$  is 2-thienyl it is optionally additionally substituted by pyridyl, 2-thienyl or 3-pyrazolyl each of which is optionally substituted by halo or a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro and when  $R^5$  is indol-3-yl it is optionally additionally substituted by 1-(thiazol-5-yl)methyl which is optionally substituted by halo.

- 6. (original) A compound as claimed in any one of claims 1 to 5 in which p is 0, q is 0 and  $L^1$  is 1,3-cyclohexyl.
- 7. (previously presented) A compound as claimed in any one of claims 1 to 5 in which the two nitrogen atoms are in a trans orientation on the cycloalkyl ring.
- 8. (original) A compound as claimed in claim 7 wherein the absolute configuration of the cycloalkyl carbon atoms to which the nitrogen atoms are attached is S, S.
- 9. (previously presented) A compound according to any one of claims 1 to 5 in which R<sup>5</sup> represents one of the following:

```
1H-pyrrolo[3,2-c]pyridinyl;
```

1*H*-pyrrolo[2,3-*b*]pyridinyl;

1*H*-indazolyl;

1-imidazo[1,2-*a*]pyridinyl;

5H-pyrrolo[2,3-b]pyrazinyl;

1*H*-pyrrolo[3,2-*b*]pyridinyl;

1H-pyrrolo[3,2-h]quinolinyl;

2,1,3-benzothiadiazolyl; and

2,1,3-benzoxadiazolyl;

wherein each of these heterocycles is optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, or by a group  $S(O)_aR^y$  in which a is 0, 1 or 2 and  $R^y$ 

is phenyl optionally substituted by cyano, halo, a  $C_{1-4}$ alkyl group optionally substituted by one or more fluoro or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro, or by a group  $O_z(CH_2)_wR^z$  in which z and w independently are 0 or 1 and  $R^z$  represents phenyl or a heterocyclic group selected from thienyl, pyridyl, thiazolyl, pyrazolyl, wherein each  $R^z$  is optionally substituted by one or more of the following: cyano, halo, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro.

- 10. (currently amended) A compound as claimed in any one of claims 1 to 5 in which  $L^1$  represents a  $(CH_2)_pC_{3-10}$  cycloalkyl $(CH_2)_q$  group in which p and q are independently selected from 0 and 1 and in which the cycloalkyl group may be monocyclic or bicyclic and optionally may be bridged provided that the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, are not linked to the same carbon atom, and wherein one of the carbons may be replaced by O or, alternatively, the group  $-N(R^3)-L^1$  or the group  $L^4-N(R^4)$  together represent a saturated bicyclic heterocyclic ring containing from 2 to 9 carbon atoms and the nitrogen bearing  $R^3$  or  $R^4$  respectively; with the proviso that  $L^1$  is not 1,4-cyclohexyl or 1,3-cyclopentyl.
- 11. (original) One or more of the following compounds:

*N,N*-dimethyl-2-[(3-{[(5-pyridin-2-yl-2-thienyl)methyl]amino}cyclohexyl)amino]-quinoline-4-carboxamide;

(1*S*,3*S*)-*N*-(6-chloro-4-methylquinolin-2-yl)-*N*'-[(1-methyl-1*H*-indol-3-yl)methyl]cyclohexane-1,3-diamine;

(1*S*,3*S*)-*N*-(6-fluoro-4-methylquinolin-2-yl)-*N*'-(3-thienylmethyl)cyclohexane-1,3-diamine;

(1*R*,3*R*)-*N*-(6-fluoro-4-methylquinolin-2-yl)-*N*'-(3-thienylmethyl)cyclohexane-1,3-diamine;

(1*S*,3*S*)-*N*-(6-fluoro-4-methoxyquinolin-2-yl)-*N*'-(3-thienylmethyl)cyclohexane-1,3-diamine;

(1*S*,3*S*)-*N*-(6-fluoro-4-methylquinolin-2-yl)-*N*'-[(1-methyl-1*H*-indol-3-yl)methyl]cyclopentane-1,3-diamine;

*N*-(6-chloroquinolin-2-yl)-*N*'-(3-thienylmethyl)cyclohexane-1,3-diamine;

N-(6-chloroquinolin-2-yl)-N-[(1-methyl-1H-pyrrol-2-yl)methyl]cyclohexane-1,3-diamine;

*N*-(6-chloroquinolin-2-yl)-*N*'-(quinolin-3-ylmethyl)cyclohexane-1,3-diamine;

 $N^6$ ,  $N^6$ -dimethyl- $N^2$ -{3-[(3-thienylmethyl)amino]cyclohexyl}quinoline-2,6-diamine;

(1*S*,3*S*)-*N*-[(4-chloro-1-methyl-1*H*-pyrazol-3-yl)methyl]-*N*-(6-methoxy-4-methylquinolin-2-yl)cyclopentane-1,3-diamine;

(1S,3S)-N-(6-methoxy-4-methylquinolin-2-yl)-N-(1,2,3-thiadiazol-4-

ylmethyl)cyclopentane-1,3-diamine;

(1*S*,3*S*)-*N*-(6-methoxy-4-methylquinolin-2-yl)-*N*'-[(5-pyridin-2-yl-2-thienyl)methyl]cyclopentane-1,3-diamine;

(1*S*,3*S*)-*N*-({1-[(2-chloro-1,3-thiazol-5-yl)methyl]-1*H*-indol-3-yl}methyl)-*N*'-(6-methoxy-4-methylquinolin-2-yl)cyclopentane-1,3-diamine;

(1*S*,3*S*)-*N*-(6-methoxy-4-methylquinolin-2-yl)-*N*'-({5-[1-methyl-5-(trifluoromethyl)-1*H*-pyrazol-3-yl]-2-thienyl}methyl)cyclopentane-1,3-diamine;

(1*S*,3*S*)-*N*-(2,2'-bithien-5-ylmethyl)-*N*'-(6-methoxy-4-methylquinolin-2-yl)cyclopentane-1,3-diamine;

 $N^4$ ,  $N^4$ -dimethyl- $N^2$ -{3-[(3-thienylmethyl)amino]cyclohexyl}quinoline-2,4-diamine;

 $N^4$ ,  $N^4$ -dimethyl- $N^2$ -[3-({[2-(phenylsulfonyl)-1,3-thiazol-5-yl]methyl}amino)-cyclohexyl]quinoline-2,4-diamine;

 $N^2$ -(3-{[(2,4-dimethoxypyrimidin-5-yl)methyl]amino}cyclohexyl)- $N^4$ , $N^4$ -dimethylquinoline-2,4-diamine;

3-(6-methoxy-4-methylquinolin-2-yl)-N-methyl-N-(3-thienylmethyl)-3-azabicyclo[3.2.1]octan-8-amine;

6-methoxy-4-methyl-N-[((1R,2S)-2-{[(1-methyl-1H-indol-3-yl)methyl]amino}cyclopentyl)methyl]quinolin-2-amine;

(1S,3S)- N-(6-fluoro-4-methylquinolin-2-yl)-N-[(1-methyl-1H-pyrrolo[2,3-b]pyridin-3-yl)methyl]cyclopentane-1,3-diamine;

(1*S*,3*S*)-3-[({3-[(7-methoxy-4-methylquinolin-2-yl)amino]cyclopentyl}amino)methyl]-1-methyl-1*H*-indole-6-carbonitrile;

(1S,3S)- N-(6-fluoro-4-methylquinolin-2-yl)-N-[(1-methyl-1H-indol-2-yl)-N-[(1-methyl-1H-i

yl)methyl]cyclopentane-1,3-diamine;

(1*S*,3*S*)- *N*-(6-fluoro-4-methylquinolin-2-yl)-*N*'-({1-[3-(trifluoromethyl)pyridin-2-yl]-1*H*-indol-3-yl}methyl)cyclopentane-1,3-diamine;

(1*S*,3*S*)- *N*-(6-fluoro-4-methylquinolin-2-yl)-*N*'-[(1-methyl-1*H*-indazol-3-yl)methyl]cyclopentane-1,3-diamine;

(1*S*,3*S*)-*N*-(7-methoxy-4-methylquinolin-2-yl)-*N*'-({1-[4-(trifluoromethyl)phenyl]-1*H*-pyrrol-3-yl}methyl)cyclopentane-1,3-diamine;

3-[({(1*S*,3*S*)-3-[(7-methoxy-4-methylquinolin-2-yl)amino]cyclopentyl}amino)methyl]-1-methyl-1*H*-indole-5-carbonitrile;

(1S,3S)-N-{[5-difluormethoxy-1H-indol-3-yl]methyl}-N-(7-methoxy-4-methylquinolin-2-yl)cyclopentane-1,3-diamine;

(1S,2S,4R,6S)-N-(6-methoxy-4-methylquinolin-2-yl)-N'-(3-

thienylmethyl)bicyclo[2.2.1]heptane-2,6-diamine;

(1R,2S,4S,6S)-N-(6-methoxy-4-methylquinolin-2-yl)-N'-(3-

thienylmethyl)bicyclo[2.2.1]heptane-2,6-diamine;

(1*S*,2*S*,4*R*,6*S*)-*N*-(7-methoxy-4-methylquinolin-2-yl)-*N*'-[(1-methyl-1*H*-indol-3-yl)methyl]bicyclo[2.2.1]heptane-2,6-diamine;

6-methoxy-4-methyl-*N*-[(1*S*,2*R*)-2-({[(1-methyl-1*H*-indol-3-

yl)methyl]amino}methyl)cyclopentyl]quinolin-2-amine;

(1*S*,3*S*)-*N*-(7-methoxy-4-methylquinolin-2-yl)-*N*'-[(1-methyl-1*H*-pyrrolo[3,2-*h*]quinolin-3-yl)methyl]cyclopentane-1,3-diamine;

(1S,3S)-N-(6-fluoro-4-methylquinolin-2-yl)-N'-[(1-methyl-1H-pyrrolo[2,3-c]pyridin-3-yl)methyl]cyclopentane-1,3-diamine;

(1S,3S)-N-(7-methoxy-4-methylquinolin-2-yl)-N'-[(1-methyl-1H-pyrrolo[3,2-b]pyridin-3-yl)methyl]cyclopentane-1,3-diamine;

(1S,3S)-N-(6-fluoro-4-methylquinolin-2-yl)-N'-(imidazo[1,2-a]pyridin-3-ylmethyl)cyclopentane-1,3-diamine;

(1*S*,3*S*)-*N*-{[5-(Benzyloxy)-1-methyl-1*H*-indol-3-yl]methyl}-*N*'-(7-methoxy-4-methylquinolin-2-yl)cyclopentane-1,3-diamine;

(1S,3S)-N-(7-Methoxy-4-methylquinolin-2-yl)-N'-[3-(trifluoromethoxy)benzyl]-

#### **DOCKET NO.: 133087.11001 (101294-1P US)**

**PATENT** 

cyclohexane-1,3-diamine;

(1S,3S)-N-(2,1,3-Benzothiadiazol-4-ylmethyl)-N'-(7-methoxy-4-methylquinolin-2-yl)cyclohexane-1,3-diamine;

(1S,3S)-N-[(1,3-Dimethyl-1H-pyrazol-4-yl)methyl]-N'-(7-methoxy-4-methylquinolin-2-yl)cyclohexane-1,3-diamine; and

(1S,3S)-N-(2-Bromo-4-methoxybenzyl)-N'-(7-methoxy-4-methylquinolin-2-yl)cyclohexane-1,3-diamine;

and pharmaceutically acceptable salts thereof.

- 12. (canceled).
- 13. (previously presented) A pharmaceutical formulation comprising a compound as defined in any one of claims 1 to 5 or claim 11 and a pharmaceutically acceptable adjuvant, diluent or carrier.
- 14. (cancelled).
- 15. (previously presented) A method of treating obesity, a psychiatric disorder, anxiety, an anxio-depressive disorder, depression, bipolar disorder, ADHD, a cognitive disorder, a memory disorder, schizophrenia, epilepsy, a neurological disorder and a pain related disorder, comprising administering a pharmacologically effective amount of a compound as claimed in any one of claims 1 to 5 or claim 11 to a patient in need thereof.
- 16. (canceled).

17. (currently amended) A process for the preparation of a compound of formula I

$$(R^{1})_{n}$$
 $(R^{2})_{m}$ 
 $N - L^{1} - N - L^{2} - R^{5}$ 
 $R^{3}$ 
 $R^{4}$ 

comprising reacting a compound of formula II

$$(R^{1})_{n} \xrightarrow{\qquad \qquad N \qquad \qquad N \qquad \qquad L^{1} \longrightarrow N + 1 \qquad \qquad N \qquad$$

in which

 $R^1$  represents a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, halo, cyano, a group  $OSO_2C_{1-4}$  alkyl wherein the alkyl group is optionally substituted with one or more fluorine atoms, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

n represents 0, 1, 2 or 3;

 $R^2$  represents a  $C_{1-4}$ alkyl group optionally substituted by one or more fluoro or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

m represents 0 or 1;

R<sup>3</sup> represents H or a C<sub>1-4</sub> alkyl group;

 $L^1$  represents a  $(CH_2)_pC_{3-10}$  cycloalkyl $(CH_2)_q$  group in which p and q are independently selected from 0 and 1 and in which the cycloalkyl group may be monocyclic or bicyclic and optionally may be bridged provided that the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, are not linked to the same carbon atom, and wherein one of the carbons may be replaced by O or, alternatively, the group  $-N(R^3)-L^1$ - or the group  $L^4-N(R^4)$  together represent a saturated bicyclic heterocyclic ring containing from 2 to 9 carbon atoms and the nitrogen bearing  $R^3$  or  $R^4$  respectively; and

 $R^4$  represents H or a  $C_{1-4}$  alkyl group optionally substituted by one or more of the following: fluoro or  $C_{1-4}$  alkoxy optionally substituted by one or more fluoro;

with a compound of formula III

$$R^{5}-L^{2'}=0$$

Ш

in which  $R^5$  is as previously defined and  $L^{2'}$  represents a group which after reaction of compounds II and III gives  $L^2$  on reduction, under reductive alkylation conditions.

### 18. (currently amended) A compound of formula II

$$(R^{1})_{n} \xrightarrow{\qquad \qquad (R^{2})_{m}} N \xrightarrow{\qquad \qquad L^{1}-NH} R^{3} \qquad R^{4}$$

in which

 $R^1$  represents a  $C_{1-4}$  alkoxy group optionally substituted by one or more fluoro, a  $C_{1-4}$  alkyl group optionally substituted by one or more fluoro, halo, cyano, a group  $OSO_2C_{1-4}$  alkyl wherein the alkyl group is optionally substituted with one or more fluorine atoms, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a

C<sub>1-4</sub>alkyl group or R<sup>c</sup> and R<sup>d</sup> together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

n represents 0, 1, 2 or 3;

 $R^2$  represents a  $C_{1-4}$ alkyl group optionally substituted by one or more fluoro or a  $C_{1-4}$ alkoxy group optionally substituted by one or more fluoro, a group  $NR^aR^b$  in which  $R^a$  and  $R^b$  independently represent H or a  $C_{1-4}$  alkyl group or  $R^a$  and  $R^b$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring optionally including an O, a group  $CONR^cR^d$  in which  $R^c$  and  $R^d$  independently represent H or a  $C_{1-4}$ alkyl group or  $R^c$  and  $R^d$  together with the nitrogen atom to which they are attached represent a saturated 3 to 7 membered heterocyclic ring;

m represents 0 or 1;

R<sup>3</sup> represents H or a C<sub>1-4</sub> alkyl group;

 $L^1$  represents a  $(CH_2)_pC_{3-10}$  cycloalkyl $(CH_2)_q$  group in which p and q are independently selected from 0 and 1 and in which the cycloalkyl group may be monocyclic or bicyclic and optionally may be bridged provided that the two nitrogens bearing  $R^3$  and  $R^4$ , respectively, are not linked to the same carbon atom, and wherein one of the carbons may be replaced by O or, alternatively, the group  $-N(R^3)-L^1$ - or the group  $L^4-N(R^4)$  together represent a saturated bicyclic heterocyclic ring containing from 2 to 9 carbon atoms and the nitrogen bearing  $R^3$  or  $R^4$  respectively; and

 $R^4$  represents H or a  $C_{1-4}$  alkyl group optionally substituted by one or more of the following: fluoro or  $C_{1-4}$  alkoxy optionally substituted by one or more fluoro.

- 19. (previously presented) A compound selected from one or more of:
  - (1S, 3S)-Dibenzyl-cyclohexane-1,3-diylbiscarbamate; and
  - (1S, 3S)-Cyclohexane-1,3-diamine dihydrochloride.
- 20. (previously presented) A method of treating obesity, type II diabetes, or Metabolic syndrome comprising administering a pharmacologically effective amount of a compound as claimed in any one of claims 1 to 5 or claim 11 to a patient in need thereof.

# DOCKET NO.: 133087.11001 (101294-1P US)

**PATENT** 

21. (previously presented) A method of preventing type II diabetes comprising administering a pharmacologically effective amount of a compound as claimed in any one of claims 1 to 5 or claim 11 to a patient in need thereof.